## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	)
Ronald D. McCallister et al.	) Group Art Unit: 2611
Application No.: 10/718,507  For: Constrained-Envelope Digital- Communications Transmission System and Method Therefor  Application No.: 10/718,505  For: Constrained-Envelope Transmitter and Method Therefore  Filed: November 19, 2003	Examiner: Corrielus, Jean B

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

## DECLARATION OF PAUL BERNKOPF UNDER 37 C.F.R. § 1.132

I Paul Bernkopf hereby make the following declaration:

- 1. I am the Vice President and Assistant Secretary of Intersil Americas Inc., the sole assignee of the above-captioned reissue patent application.
  - 2. I am a registered patent attorney. My registration number is 41,615.
- 3. On Thursday, August 14, 2003, I received an e-mail from Ronald McCallister, the inventor of the above-captioned application. A true copy of this email is found in Appendix 1. The August 14, 2003, e-mail included a Memorandum as an attachment. A true copy of this Memorandum is found in Appendix 2.

- 4. In the Memorandum, Mr. McCallister asked "to discuss potential licensing" of U.S. Patent No. 6,366,619 ("the '619 patent") and U.S. Patent No. 6,104,761 ("the '761 patent") for his employer CrestCom. The '761 patent and the '619 patent form the basis of the above-cited reissue patent applications.
- 5. In particular, the Memorandum dated August 14, 2003, from Mr. McCallister stated:

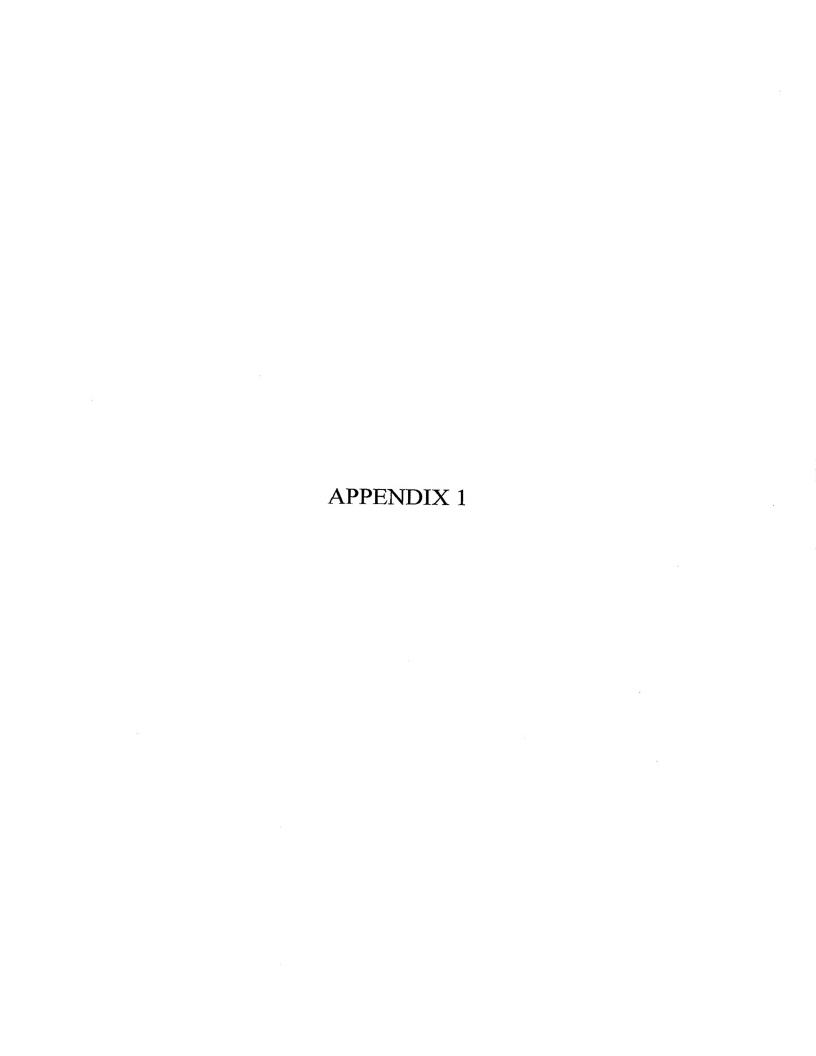
We wish to discuss potential licensing of two CERN patents (6,104,761, filed 8/15/00, and 6,366,619, filed 04/02/02) . . . [A]n exclusive license to CERN might nonetheless be valuable to CrestCom.

## See Appendix 2, ¶ 3.

- 6. Subsequent to Mr. McCallister's August 14, 2003, e-mail and in response to Mr. McCallister's request, CrestCom and Intersil Americas Inc. engaged in discussions related to the licensing of the '619 and '761 patents by CrestCom.
- 7. Ultimately, Intersil Americas Inc. did not license any rights to the '761 or '619 patents to CrestCom.

I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 101 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Dated:	By: and Sembor	
Datou.	Faul Bernkopf	



From: Ron McCallister [mallto:rondonaz@cox.net]

Sent: Thursday, August 14, 2003 4:44 PM

Ta: Bernkopf, Paul

Cc: Bob Solem; Weaver, Duncan

Subject: Teleconference background

Paul,

The attached memo provides brief background notes for tomorrow's conference call. I look forward to our discussion.

<<PaulBernkopfMemo.doc>>

Regards,

Ron

## Ron McCallister

"Si hoc legere scis, nimium eruditionis habes." <<Ron McCallister.vcf>>

Ron McCallister \( \sigma \text{on@crestcominc.com} \)

President

CrestCom, Inc.

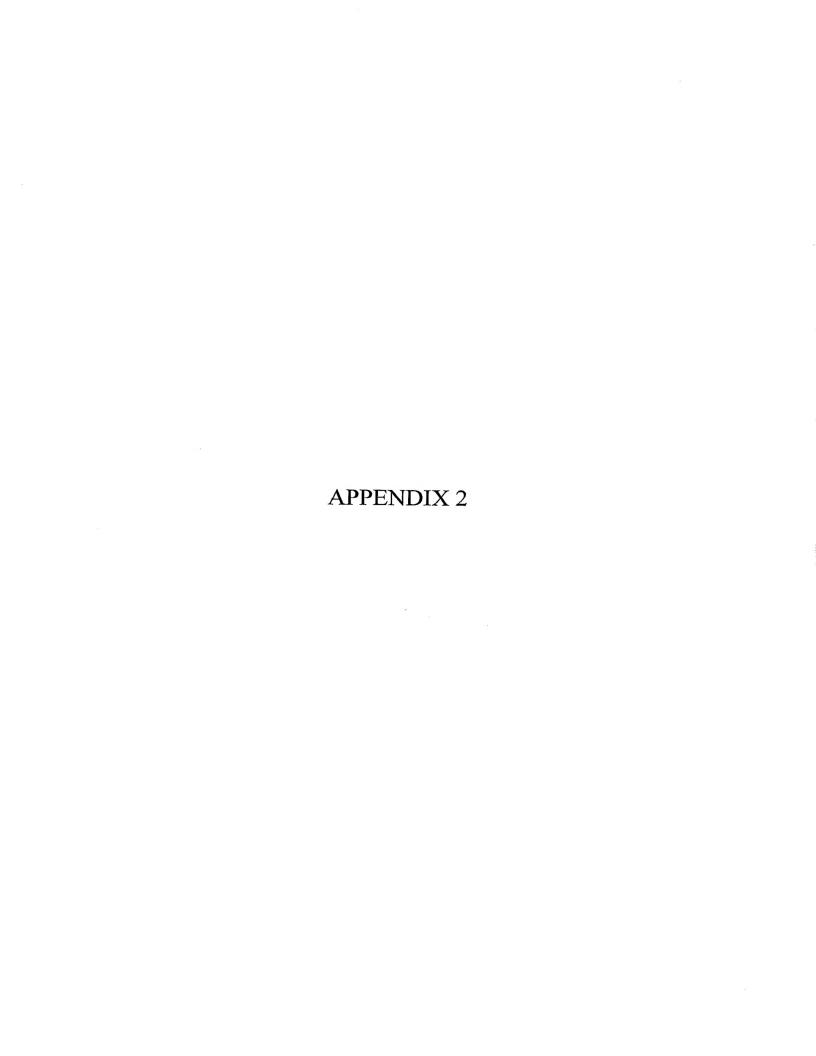
Content-Description: PaulBernkopfMemo.doc

PaulBernkopfMemo.doc Content-Type:

application/msword

Content-Encoding:

base64



To: From: Paul Bernkopf Ron McCallister

Date:

8/13/03

Subject: Background information for teleconference call on Friday, August 15, 2003

Introduction: Bob Solem and I recently formed CrestCom to develop intellectual property to improve amplifier efficiency when transmitting multiple signals. We have filed for a patent covering our approach, and we do not believe our approach infringes on Intersil's patents for CERN (constrained-envelope root-nyquist) technology. Obviously this point is most until we see the detailed claims awarded for both CERN technology and ours. Nonetheless, the pending sale of WiFi technology to Globespan Virata prompted us to make Intersil aware of our intentions, and of the potential value that the CERN patents might have. It is in the spirit of cooperation with our former colleagues that we requested this discussion, and we appreciate your making time in your busy schedules to accommodate it.

Strategic Vision: We at CrestCom envision a transition from the current cellular base station infrastructure to a worldwide network of flexible access points capable of serving multiple wireless functions, e.g., cellular telephony, WiFi and WiMAX. CrestCom has focused on developing and patenting signal processing techniques to significantly reduce amplification costs for such access nodes, which must simultaneously transmit multiple signals. We believe our technology to be defensible and we also believe our business model to be capable of supporting margins consistent with Intersil's business model. CrestCom's business model is, in fact, a fabless signal processing semiconductor play and it has occurred to us that there might be an interest on Intersil's part to work together with CrestCom in ways that go beyond the patent discussions herein. We have two specific objectives: 1) to discuss issues regarding our interest in licensing CERN patents; 2) to share our strategic vision and see whether Intersil's focus on high-margin semiconductor products might motivate potential collaboration.

CERN patents: We wish to discuss potential licensing of two CERN patents [6,104,761, filed 08/15/00, and 6,366,619, filed 04/02/02] and two pending patents [20030063683 and 20030063682, both filed on April 3, 2003]. While we believe that our new approach does not infringe on CERN, an exclusive license to CERN might nonetheless be valuable to CrestCom. Against four CDMA signals, typical peak-to-average-power-ratio reduction approaches offer ~2dB of gain; CERN offers ~3dB; our approach offers ~6dB. Technology-related margins depend on net benefit over competing approaches, so it is as valuable to keep competitors from using CERN as to squeeze an extra 1 dB from our approach. Since our approach provides performance near the theoretical limit, it is more practical to consider licensing CERN than additional R&D. In summary, there are two reasons for us to want to discuss licensing CERN: one to cover patent coverage unpredictability, and the other to increase our competitive advantage.

The value of a patent lies in its ability to restrict use by competitors, so we need to address a key concern over the basic defensibility of the awarded patents. Recently, as I was searching for prior art on behalf of CrestCom, I discovered that Dr. Hermann Rohling published, in May 1998, a precise description of CERN - four months prior to our filing date. Sandra Rul regret not finding this article (which I have faxed to Sandy) during the original CERN searches, but it was disclosed at a conference on Vehicular Technology, not where one usually finds communication advances. Nonetheless, the Conference Proceedings volumes were sent to thousands of libraries, so it clearly constitutes prior art, and might render the single-signal CERN patents unenforceable. We are interested in your opinion. It is also possible that the pending CERN patent filings, multi-signal CERN, will suffer coverage loss as a result of this prior art, and so we may have to await the examiner's conclusions before knowing how valuable the new, multi-signal, CERN patents are. CrestCom intends to move forward in this area, and is interested in licensing multi-signal CERN based on the need to do so as determined by awarded patent claims. We must await the ruling on our own technology regarding CERN as prior art. Regardless of the outcome of the patent issues, there are other possibilities for mutual cooperation that we would like to discuss as well.